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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|-------------------|
| 10/662,369 | 09/16/2003 | Youichi Matsuyama | 02-100 | 9413 |
| 23400 | 7590 | 10/27/2004 | EXAMINER | |
| POSZ & BETHARDS, PLC 11250 ROGER BACON DRIVE SUITE 10 RESTON, VA 20190 | | | | MULLINS, BURTON S |
| | | ART UNIT | | PAPER NUMBER |
| | | 2834 | | |

DATE MAILED: 10/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/662,369 | MATSUYAMA ET AL. | |
| | Examiner | Art Unit | |
| | Burton S. Mullins | 2834 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 21 September 2004.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-18 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) 3-12 and 14-16 is/are allowed.

6) Claim(s) 1,2,17 and 18 is/are rejected.

7) Claim(s) 13 is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

- Certified copies of the priority documents have been received.
- Certified copies of the priority documents have been received in Application No. _____.
- Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.

4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.

5) Notice of Informal Patent Application (PTO-152)

6) Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-2 and 17-18 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-2 and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over any one of Muta (US 5,816,839) or Herve (US 6,175,179), further in view of Niki et al. (JP 10-108402). Muta teaches an electric motor comprising: a motor main body 1 that is rotated upon energization of the motor main body (Fig.1); a speed reducing unit that includes: a speed reducing mechanism (i.e., gearing, c.3, lines 49-52) that reduces rotational speed of the motor main body; and a gear housing 8 that receives the speed reducing mechanism; a connector housing 26 (Fig.2) that is detachably connected to the gear housing 8 and is connectable with an external connector (wires 35), wherein the connector housing 26 is formed separately from the gear housing 8 (Fig.2); the connector housing 8 includes a plurality of connection terminals 30 (Fig.4) that are secured to the connector housing; and the connection terminals 30 of the

connector housing 8 are connectable with corresponding terminals of the external connector 35 (by means of wire barrels 33; c.5, lines 1-5).

Similarly, Herve teaches an electric motor comprising: a motor main body (rotor) 1 that is rotated upon energization of the motor main body (Fig.2); a speed reducing unit that includes: a speed reducing mechanism (reduction gearing 5) that reduces rotational speed of the motor main body; and a gear housing 2 that receives the speed reducing mechanism; a connector housing 4 that is detachably connected to the gear housing 2 and is connectable with an external connector (not shown, inherent; Fig.1), wherein the connector housing 4 is formed separately from the gear housing (Fig.1); the connector housing 4 includes a plurality of connection terminals (not numbered, connected with 32) that are secured to the connector housing (Fig.1); and the connection terminals are connectable with corresponding terminals of the external connector (Fig.1).

Muta does not specifically disclose “a control circuit board that is held in the gear housing and has at least one electric circuit component” to which the connection terminals 20 are detachably connected, and Herve does not specifically disclose “a control circuit board that is held in the gear housing and has at least one electric circuit component” to which the connection terminals of the connector housing 4 are detachably connected.

Niki teaches a motorized reduction gear including motor 1 and gear casing 3 (Figs.1&2). A control circuit board 12 is held in the gear casing 3 (Fig.1). The board includes brush supporter/holder 10. The arrangement reduces parts for supplying power to the armature.

It would have been obvious to one having ordinary skill in the art to modify either Muta or Herve and provide a control circuit board in the gear casing per Niki since the control circuit would have been desirable to supply power to the armature and also reduce the number of parts during manufacture.

Regarding claim 2, although the combination of Muta or Herve with Niki does not specify the order of installation of the board, the end product is the same, and it has been held that “even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.” In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985)

Regarding claims 17-18, the connector housings in both Muta and Herve are not welded to the gear housing, nor connected thereto using a bonding material.

Allowable Subject Matter

4. Claims 3-12 and 14-16 are allowed. Claims 3, 5-9 and 14-15 incorporate indicated allowable subject matter.

5. Claim 13 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The circuit board in Niki is parallel with the output shaft axis, not perpendicular thereto.

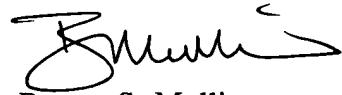
Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Burton S. Mullins whose telephone number is 571-272-2029. The examiner can normally be reached on Monday-Friday, 9 am to 5 pm. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Burton S. Mullins
Primary Examiner
Art Unit 2834

bsm
25 October 2004